











Recycle More. Waste Less.

Pondering Plastic

We get a LOT of questions about plastic. Folks want to know if they're putting the right things into their recycling bins. And they often want to know why some things just are not recyclable. So, this issue focuses on plastic, the most complex of recyclable materials. Let's begin with an explanation of plastic *manufacturing* that just might help you understand plastic *recycling*.

There are many types of plastic used in manufacturing; different types are suited for different product applications. This means that our homes are filled with a wide variety of plastic products—many of which are recyclable, but not all. The plastics industry has developed identification codes to label different kinds of plastic. The identification system divides plastic into seven distinct categories and uses number codes which can generally be found on the bottom of plastic containers. (More information on each plastic type and its particular uses can be found on our website.) Examples of plastic identification codes are:

However, combining the numbering system with the well-recognized "chasing arrows" recycling symbol can be misleading. Just because an item has this symbol on it doesn't mean it is actually recyclable everywhere. There has to be a market available for the particular type of plastic, so referring to the symbol as an indicator of *local* recyclability isn't a good idea. In other words, a material such as expanded polystyrene (often mistakenly called "styrofoam") may *technically* be recyclable…but if there isn't a viable market that wants the material, then it is not recyclable in practice.

Even plastic types with an available recycling market can be problematic; two different plastic products marked with the same resin ID number may not both be recyclable! For example, PET (polyethylene terephthalate), shown with the #1 symbol, is used in a wide variety of packaging applications from bottles to egg cartons to disposable cups. Although the base material is PET, manufacturers can alter the composition of the plastic depending on its designed end-use. They can vary the viscosity level, add chlorine or coat products with silicone or glycol. And even the way products are formed (blown or injection molded) affects their end-of-life recyclability and their ability to be mixed with other materials. This is why a water bottle made of #1 plastic is recyclable, but a clear, hinged deli container marked with the same symbol is not. We warned you, plastics are complicated—but we're going to make it a little easier by giving you five simple tips for recycling plastics.

(See the next page for 5 easy tips on recycling plastics...)

So, what IS plastic?

The vast majority of plastic is produced from either petroleum or natural gas. That means today's singleuse, disposable containers are made from a limited and nonrenewable resource—fossil fuels.

In fact, the Container
Recycling Institute
estimates that 18
million barrels of
crude oil are wasted
annually from plastic
bottles that are thrown
away in the United
States.



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Five Simple Rules for Recycling the Right Plastics

OK, plastics are complicated...and long-lasting; a plastic package disposed in a landfill could last thousands of years. So, if you're wondering what should go in Frederick County's blue recycling carts instead of the trash can, keep these five things in mind:

- 1. **No "mystery" plastics.** In general, throw away plastic items that are not marked with a recycling symbol or plastic resin ID code anywhere. If we don't know what kind of plastic it is, it's hard to recycle it.
- 2. **No microwaveable plastics.** These materials have been treated to be heat-resistant and therefore do not melt well or recombine with other plastics during the recycling process.
- 3. **No expanded polystyrene (Styrofoam™)!** When possible, try to avoid buying products made from this plastic—and consider suggesting that retailers and manufacturers use readily-available alternative materials.
- 4. **No thin, brittle plastics.** This includes "clamshell" containers (clear, hinged containers often used for produce, baked goods or takeout containers) as well as thin, disposable plastic plates and drinking cups (like plastic party cups)—even if they are marked with a "recycling symbol"!
- 5. **No trash bags.** Trash bags are not recyclable, and recyclables should not be placed inside plastic bags of any kind—they need to be loose to be sorted. (The one exception is gathering multiple recyclable plastic bags, such as grocery store bags, together inside a single recyclable plastic bag—this is actually necessary!)



SO, what are you supposed to do with used take-out containers??? Almost all carry-out food containers are either microwaveable, foam, thin/brittle or mystery plastics, none of which can be recycled. So, may we suggest you throw a party? If you're planning a dinner, play date or backyard barbeque this summer, having to-go containers on hand can provide a free carry-home option for your friends and family—and they don't need to return the container!

And One Great Tip to Make Your Life Easier...

Leave the lids on! That's right, you heard us...you can leave the lids on your bottles, jars, tubs and containers. You do have to EMPTY the container—we don't want half a bottle of soda or some funky, 3-year-old barbeque sauce... But once you've used up the contents, place the lid back on the container and toss it in the recycling bin. That means there's no need to scrape the peanut butter jar clean or try to wash out your salad dressing bottles. Whew! It'll save soap, water and your valuable time, plus, the lids are more likely to actually get recycled if they are attached to a container!

(You can clean containers if it makes you happy! It's nice, it does the sorting facility staff a favor, and it might help keep your cart tidy; it's just not required for recycling.)



According to the Beverage Marketing Corporation, in 1976 the average American consumed 1.6 gallons of bottled water annually. Today, we each drink an average of 29.2 gallons of bottled water per year! In 2011 that totaled 9.1 BILLION gallons of bottled water sold in the United States. (...That's a LOT of plastic packaging!)

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Can You Spot the "Oops!"?

Frederick County residents do a great job of supporting and participating in the single-stream recycling program...but even avid recyclers with the best of intentions don't always get the details of recycling right. To find simple recycling tips and explanations of how the program works, please refer to our handout 'Recycling the Right Way', available online at: www.FrederickCountyMD.gov/oops!

Test your recycling savvy! Can you spot the common mistakes in these scenes of local curbside recycling?









Answers to the "Oops!":

- 1. The <u>curbside</u> recycling program is designed to primarily collect *packaging and paper*, which comprise the majority of household recyclables. Other recyclable items, such as scrap metal and electronics (such as the keyboard pictured), can be brought to the <u>recycling drop off areas</u> at the landfill. Also, while there is no size limit to boxes that can be set out for collection, we do ask that they be kept out of the street, in the interest of public safety. Along the same line of reasoning, access to a fire hydrant should be kept open.
- 2. There is no limit to the number of cardboard boxes that can be set out for household recycling collection, and they don't even need to flattened or bundled—but all non-recyclable packaging materials, such as "Styrofoam", must be removed.
- 3. Bulky rigid plastic items—such as the sliding board pictured here—cannot be recycled curbside, but CAN be brought to the collection bin designated for recycling large plastic items at the landfill recycling drop off area. Also, absolutely no recyclables are accepted inside trash bags, at the curb or elsewhere.
- 4. We love to see a neighborhood recycling...but please remember that everyone's carts need to be within 6 feet of the curb for collection.

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New Life for Old Plastics

plastic/composite lumber

See if you can match up what your old plastic items just might get recycled into! (answers in yellow box below)

Recyclables: water bottle milk jug shampoo bottle plastic grocery bag medicine bottle yogurt container Recycled Products:

The Care and Feeding of Recycling Carts

flower pot

OK, most folks do know what to "feed" the big, blue cart (there's even a picture menu printed right on the lid), but here are two other requirements to properly care for carts.

wrap covering an electric cord

fleece jacket

• If you move, the cart stays put. Recycling carts are the property of Frederick County Government and are assigned to specific households, not specific people. We know, you'll miss your big, blue buddy—but if you move within Frederick County, we'll make sure you get another recycling friend at your new house!

• Our carts are cool just the way they are; don't alter them in any way. If you'd like to mark a cart so you know it's the one assigned to your household, try using duct tape and write the house number on that. Or

tape a handy copy of your collection schedule (<u>available here</u>) inside the lid and write on that. And there's no need to drill drainage holes in the bottom of a cart—just recycle *empty* containers (rinsed and/or with lids on) and keep the cart's lid closed!

Answers to the plastics match: 1-C, 2-E, 3-D, 4-A, 5-F, 6-B



Frederick County Department of Solid Waste Management

9031 Reichs Ford Road Frederick, MD 21704

Office of Recycling: 301-600-2960 E-mail: recycle@FrederickCountyMD.gov

Landfill: 301-600-1848

E-mail: landfill@FrederickCountyMD.gov

Recycling service concerns, including requests for recycling carts, collection schedule inquiries, missed pickups, etc., should be directed to the contracted service provider—

Allied Waste Services—by calling 301-694-6498, or sending email to: frederickrecycles@republicservices.com

plastic toy

reusable bag